

A NEW SPECIES OF *PTEROSTYLIS*.

By (MRS.) PEARL R. MESSMER.

(Ten Text-figures.)

[Read 29th November, 1933.]

PTEROSTYLIS PULCHELLA, n. sp.

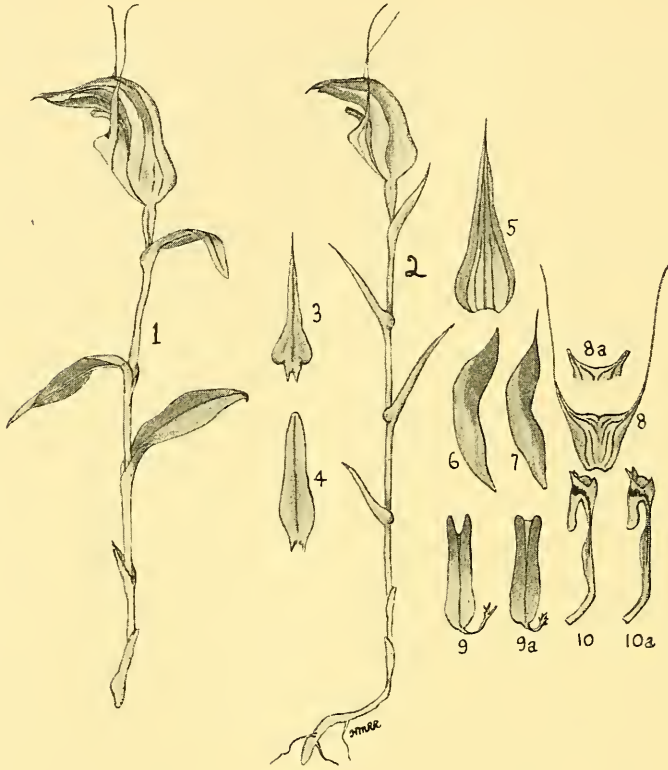
Planta gracilis 7-17 cm. alta, folius radicalibus rosulatis ad caulis basem scapo affixis, saepe absentibus; folia superiora alternia, lanceolata. Flos solitarius circa galea flexum 4-4½ cm. longus, infra translucens lineis viridibus, supra rufus. Galea breviter filamentosa, non deflexa. Petala paena tam longa quam sepalum dorsale infra lata, supra concava; angustiana usque ad puncta maxime acuminata. Sepala inferiora infra lata, aliquanto gibbosa ad sinum, supra subito filamentosa, galeam multo excedentia. Labellum linearis-oblongum 14-17 mm. longum ad apicem mutabiliter bifidum rufum atrum. Appendix fasciata 5 mm × 1 mm. ad apicem dentata, dens media longissima. Columna labello fere brevior cum alis glabris; anguli superiores acutissimi vex superiores quam antheri, stigma longum, angustum, obscurum.

A slender plant 7-17 cm. high. Radical leaves in a rosette attached by a scape to the base of the stem, often absent at time of flowering. Stem leaves alternate, narrow to broad-lanceolate, sheathing at base. Flower solitary, 4-4½ cm. long round the curve of the galea, translucent-white with green bands below, red-brown above. Galea curving gradually up to the point where it is embraced by the lower sepals, thence horizontal to the finely acuminate or shortly filamentose apex. Petals nearly as long as the dorsal sepal, broad below, concave above and narrowing to finely acuminate points. Lower sepals broad below, somewhat gibbous at the sinus, above suddenly contracted into filaments extending far above the galea. Labellum linear-oblong, 14-17 mm. long, variably bifid at the apex, dark red. Appendage fasciate, 5 mm. × 1 mm., deeply dentate at the apex, the median tooth the longest. Column a little shorter than the labellum, wings glabrous with very acute upper angles hardly exceeding the height of the anther. Stigma long, narrow, obscure.

The first specimens of this plant were discovered in April, 1932, in a parcel of material sent to me for examination by Mr. R. McNall, who found them growing on rocks and associated with *Liparis reflexa*, *Hymenophyllum Tunbridgense* and *Dicranoloma Billardieri* in the moist shade of the gorge of Fitzroy Falls, N.S.W.

Though like no other known *Pterostylis*, it suggests affinities with *P. grandiflora*, *P. ophioglossa* and *P. reflexa*, and may even have originated as a natural hybrid between *P. grandiflora* and *P. ophioglossa* as the first specimens examined suggested; but more material being available this year (1933) has placed it in the rank of a constant species. The distinguishing features, though variable, are

constant in their distinction, i.e., the shape and set of the apex of the galea, the labellum and the appendage at the base of the labellum. In dissection the dorsal sepal approaches that of *P. ophioglossa*, the lower sepals those of *P. grandiflora*. The column appears to be intermediate between that of *P. ophioglossa* and that of *P. grandiflora*, whilst the petals and base of the labellum are nearer to those of *P. reflexa*.



Text-figs. 1-10.

Pterostylis pulchella, n. sp.

- 1.—Plant with obtuse leaves and flower having an obtuse subtending bract.
 2.—Plant with very acute leaves. 3, 4.—Variations in leaf. 5.—Dorsal sepal.
 6, 7.—Petals acuminate and shortly filamentose. 8.—Lateral sepals. 8a.—Showing variations in sinus between lateral sepals. 9, 9a.—Labella. 10, 10a.—Columns.
 Fig. 1 is of the type specimen.